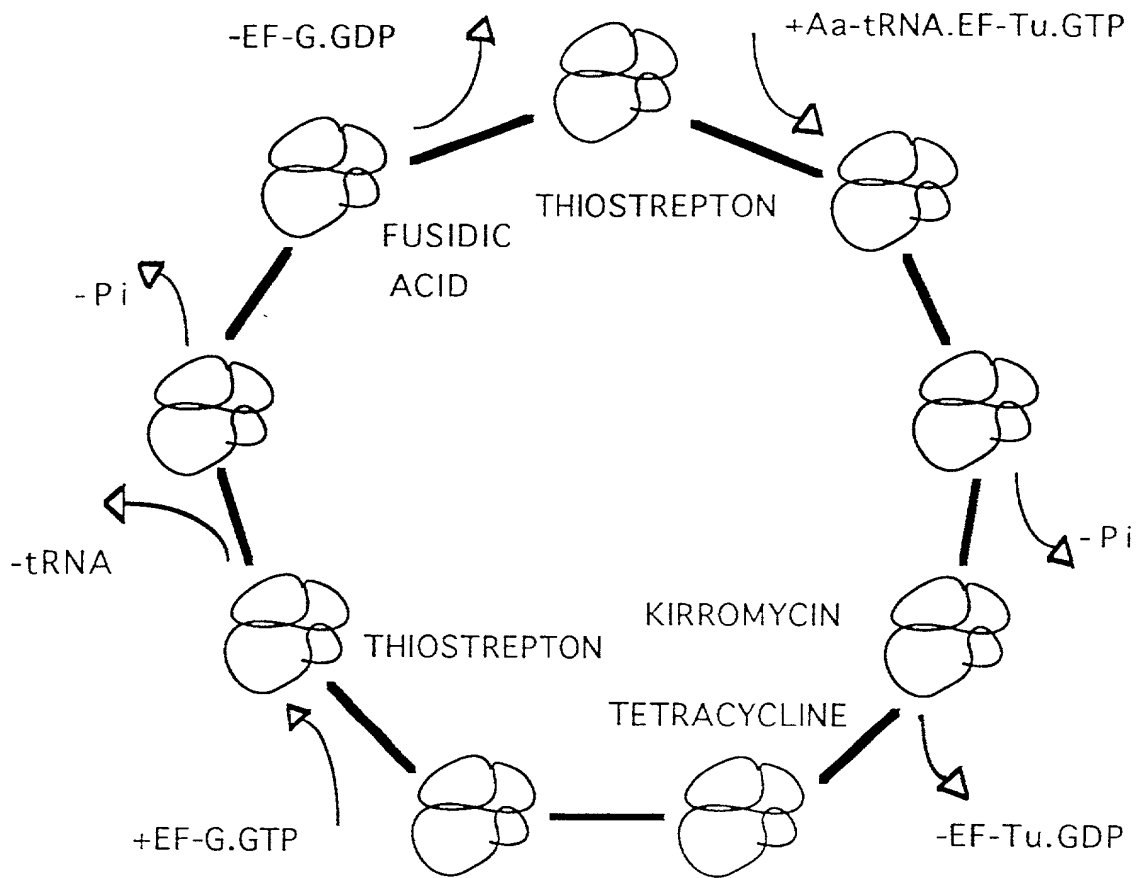


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Fig. 1



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Figure 2A

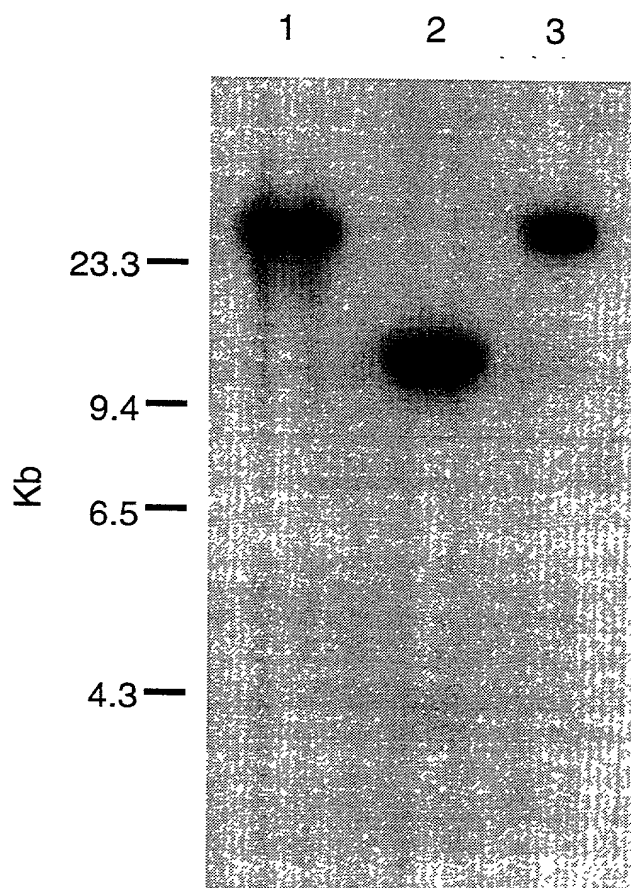
		10	20	30	40	50	
eftu_anani	1	MAPAKFERITK	PHANIGTIGH	VDHGKTTTLTA	AITTVLAKAG	MAKAPAT--A	50
eftu_cryph	1	MAPDKFERSK	PHVNIGTIGH	VDHGKTTTLTA	AISATL--S	TKSKREFD--	50
eftu_cyapa	1	MAPQKFDGK	PHVNIGTIGH	VDHGKTTTLTA	AITTLALAS	KKAPKYD--	50
eftu_pf	1	MNNKL--LRNK	OHNLGSTIGH	VDHGKTTTLT	AISYLN--L	LSK--KYNYS	50
eftu_ecoli	1	MSKEKFEFITE	PHVMVETIGH	VDHGKTTTLTA	AITTVLAKTY	GEAPAFDQ-	50
		60	70	80	90	100	
eftu_anani	51	DIDAAPEEKA	RGITINTAHV	EYETGHRHYA	HVDCPGHADY	VKNMITGAAQ	100
eftu_cryph	51	EIDSAPEEKA	RGITINTAHV	EYETDKWYA	HVDCPGHADY	VKNMITGAAQ	100
eftu_cyapa	51	EIDAAPEEKA	RGITINTAHV	EYETGHRHYA	HVDCPGHADY	VKNMITGAAQ	100
eftu_pf	51	DIDSAPEEKI	RGITINTIHI	EYETLTKHCA	HVDCPGHSYD	VKNMITGATQ	100
eftu_ecoli	51	-IDNAPEEKA	RGITINTSHV	EYDTPT RHYA	HVDCPGHADY	VKNMITGAAQ	100
		110	120	130	140	150	
eftu_anani	101	MDGAILVVSA	ADGPMPTRE	HILLAKQVGV	PNIVVFLNKE	DMVDDAEELLE	150
eftu_cryph	101	MDGAILVCSA	ANGPMPTRE	HILLAKQVGV	PNIVVFLNKA	DMVDDAEELLE	150
eftu_cyapa	101	MDGAILVVSA	ADGPMPTRE	HILLAKQVGV	PNMVVFLNKE	DMVDDAEELLE	150
eftu_pf	101	MDLILVLSL	IDGIMPQTYE	HILLAKQVGV	KNIIITFLNKE	DLCDVVELID	150
eftu_ecoli	101	MDGAILVVA-	TGPMPTRE	HILLERQVGV	PNIIITFLNKC	DMVDDAEELLE	150
		160	170	180	190	200	
eftu_anani	151	LVELEVRELL	SSYDFPGDDI	PIVAGSALQA	LEAICGGASG	QKQ--DNEVWD	200
eftu_cryph	151	LVELEVRELL	EKYDFPGSEI	PIVAGSALLA	LEAVANNPTI	KRG--EDKQWD	200
eftu_cyapa	151	LVELEVRELL	SKYDFPGDQI	PIVAGSALLA	LESLSSEKEL	MRG--EDKQWD	200
eftu_pf	151	FIKLEVRELL	IKYDFDLNYI	PIVAGSALAV	INI--QKQDY	ELIKSNTIQ	200
eftu_ecoli	151	LVELEVRELL	SSYDFPGDDI	PIVAGSALKK	LE-----	---GDAEWEA	200
		210	220	230	240	250	
eftu_anani	201	KILKLMEEVD	AYIPTPEREV	DKPFLMAVED	WFSITGRGTV	ATGRIERGVS	250
eftu_cryph	201	THYQLMDKVD	EYIPTPERET	DKPFLMAVED	WFSITGRGTV	ATGRIERGKV	250
eftu_cyapa	201	KILALMDAVD	EYIPTPERPI	DKSFLMAIED	WFSITGRGTV	ATGRIERGAI	250
eftu_pf	201	KLNLIQIITD	NI--IPTRKI	NDYFLMSIED	WFSITGRGTV	VTGRLEQCCI	250
eftu_ecoli	201	KILELAGFLD	SYIPEPEPAI	DKPFLLP IED	WFSISGRGTV	VTGRVERGII	250
		260	270	280	290	300	
eftu_anani	251	KVGETIEIVG	LRE--TRSTT	ITGLEMFQKT	LDEGLAGDNV	GILLRGIQKT	300
eftu_cryph	251	KVGETIEIVG	LRE--TRNTT	ITGLEMFQKS	LDEALAGDNV	GILVRGIQKT	300
eftu_cyapa	251	KVGETIEIVG	LKD--TKSTT	ITGLEMFQKT	LEEGMAGDNI	GILLRGMQKT	300
eftu_pf	251	NLNDELEILK	FEKSSPNLIT	ITGLEMFQKQ	LQAQSGDNV	GILLRNLIQK	300
eftu_ecoli	251	KVGEVEEIVG	IKETQ--KST	ITGLEMFREL	LDEGRAGENV	GILLRGIKRE	300
		310	320	330	340	350	
eftu_anani	301	DIERGMVLAK	PGSITPHTKF	ESEVYVLKAE	EGGRHTPFFP	GYRPOFYVRT	350
eftu_cryph	301	DIERGMVLAA	PGSITPHTKF	ESEVYVLTKK	EGGRHTPFFS	GYRPOFYVRT	350
eftu_cyapa	301	DIERGMVLAK	PGSITPHTQF	ESEVYVLTKD	EGGRHTPFFS	GYRPOFYVRT	350
eftu_pf	301	DIKRGMLAT	PNKLKVKYKF	TAETVILTKK	EGGRHKPFNI	GYPQFETRT	350
eftu_ecoli	301	DIERGMVLAK	PGTIRPHTKF	ESEVYVLSEK	EGGRHTPFFK	GYRPOFYVRT	350
		360	370	380	390	400	
eftu_anani	351	TDVGTGALSDF	TADDGSAAEM	MPGDRIKMT	VELINPIATE	DGMRFATIREG	400
eftu_cryph	351	TDVGTGTAQF	TSDDGSAAEM	MPGDRIKMT	AQLIHPIATE	KGMRFATIREG	400
eftu_cyapa	351	TDVGTGSLDAF	TADDGSNAEM	MPGDRIKMT	VELVHPIATE	DGMRFATIREG	400
eftu_pf	351	VDVGTGELKNI	-YLNENVQKV	ATPGDKIITLH	IELKHVIVLT	INMKFSIREG	400
eftu_ecoli	351	TDVGTGTEL-	----PEGVEM	MPGDNIKMT	VELIHPIAMD	DGLRFATIREG	400
		410	420	430	440	450	
eftu_anani	401	GRVIGAGVVS	KILQ.....	.....	.....	.....	450
eftu_cryph	401	GRVIGAGVVS	KIIE.....	.....	.....	.....	450
eftu_cyapa	401	GRVIGAGVVS	KILK.....	.....	.....	.....	450
eftu_pf	401	GRVIGAGIIT	EIKN.....	.....	.....	.....	450
eftu_ecoli	401	GRVIGAGVVA	SVLS.....	.....	.....	.....	450

Fig. 2B

ATGAATAATAAATTATTTTTTAAGAAATAAACAACATATAAA
TTTAGGTACTATAGGGCATGTAGATCATGGAAAACTACAT
TAACAACAGCTATATCTTATTTATTAAATTTACAAGGATTA
TCAAAAAAATATAATTATTCAGATATTGATTCAGCTCCAGA
AGAAAAAATAAGAGGTATTACAATAAATACAACACATATTG
AATATGAAACTTTAACAAAACATTGTGCTCATATAGATTGT
CCAGGACATTCCGATTATATTAAAAATATGATTATAGGAGC
CACACAAATGGATATAGCAATTTTAGTAATATCTATAATAG
ATGGTATAATGCCTCAAACCTTATGAACATTTATTATTAATA
AAACAAATAGGTATAAAAAAATATAATTATTTTTTTTAAATAA
AGAAGATTTTATGTGATGATGTTGAATTAATAGATTTTATAA
AATTAGAAGTAAATGAATTATTAATTAAATATAATTTTGAT
TTAAATTATATACATATATTAACCTGGTTCAGCATTAAATGT
AATAAATATAAATTCAAAAAATAAGGATTATGAATTAATAA
AATCTAATATTTGGATACAAAAATTAAATAATTTAATTCAA
ATAATTGATAATATTATAATACCTACTAGAAAAATTAATGA
TTACTTTTTTAATGTCAATAGAAGATGTATTTTCTATAACAG
GTAGAGGTACAGTAGTAACAGGTAAGATTGAACAAGGATGT
ATAAATTTAAATGATGAAATTGAAATTTTAAAATTTGAAAA
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TTAAAAACAATTAACACAAGCACAAATCCGGAGATAATGTA
GGTATTTTATTAAGAAATATTCAAAAAAAGATATAAAAAG
AGGTATGATTTTAGCAACACCTAATAAATTAAAAGTATATA
AGTCTTTTATAGCTGAAACATATATTTTAACTAAAGAAGAA
GGTGGTCGTCATAAACCTTTTAATATTGGATATAAACCTCA
ATTTTTTTATTCGTACAGTAGATGTTACTGGAGAAATTAAAA
ATATATATTTAAATGAAAATGTACAAAAAGTAGCTATACCT
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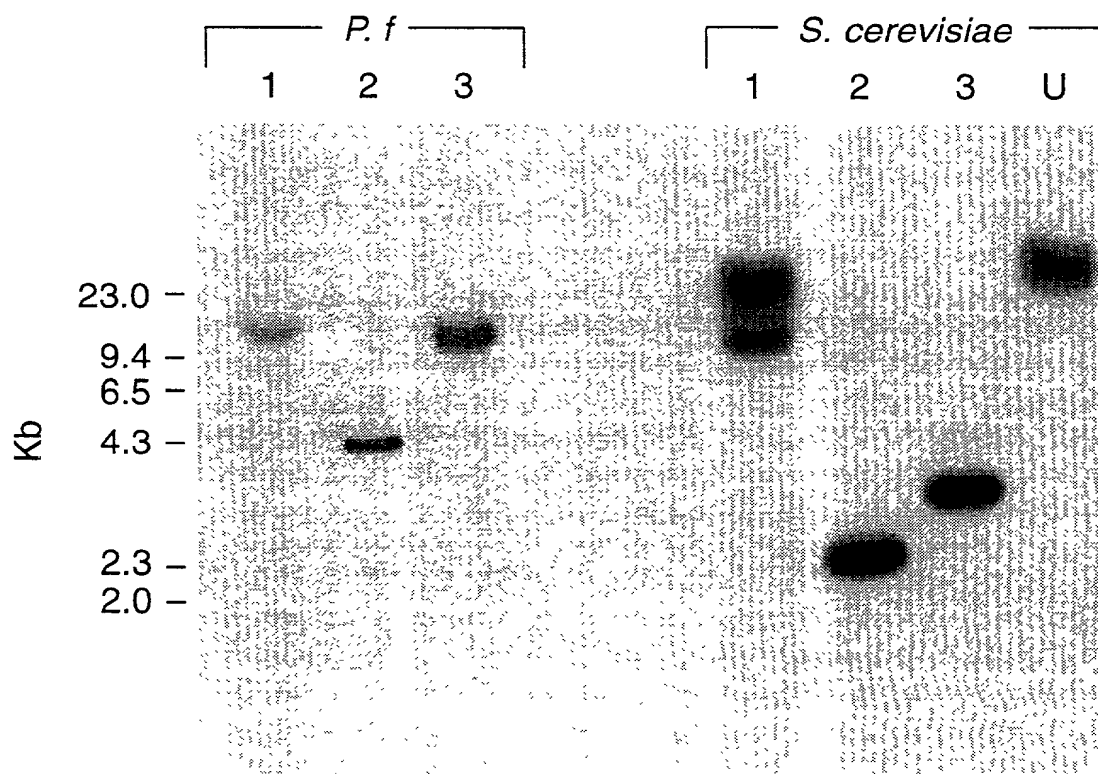
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Figure 3A



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Figure 3B



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Figure 4

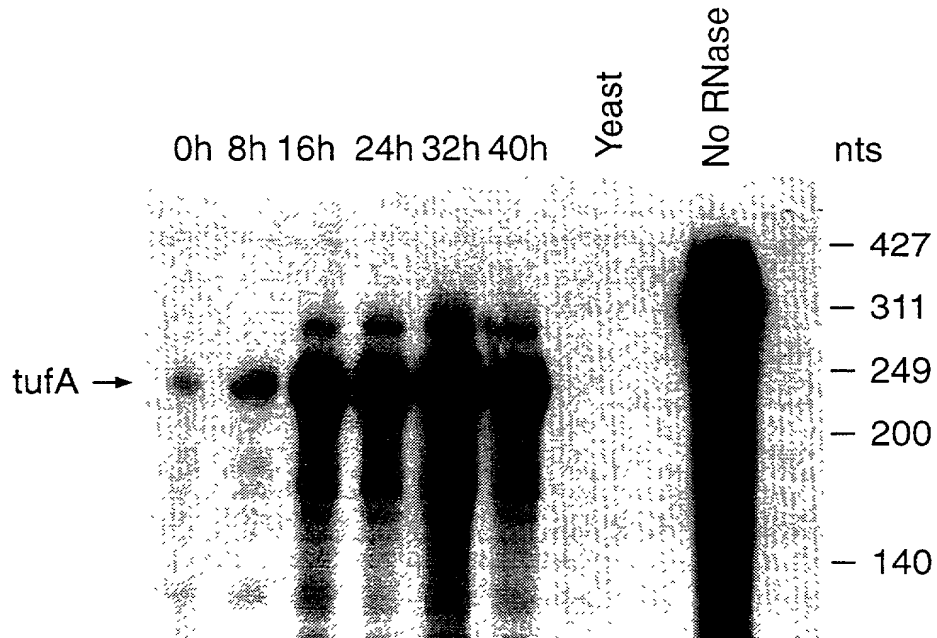


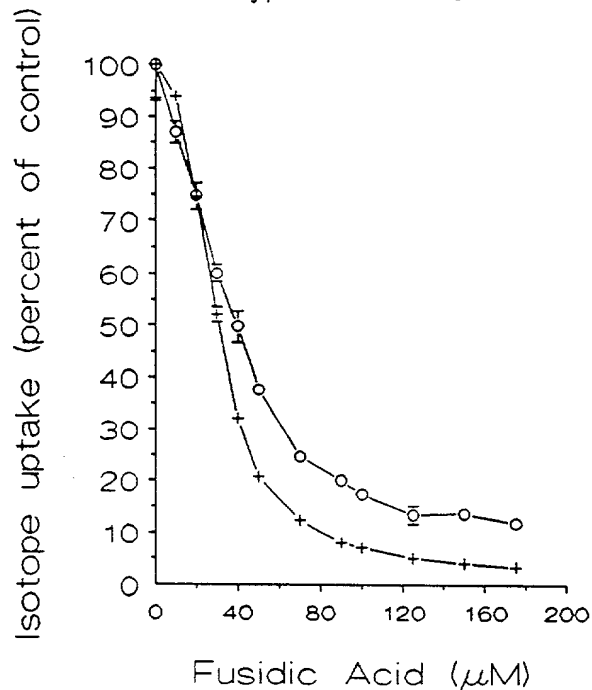
Figure 5

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(A)

Fusidic Acid
(36hr incubation)

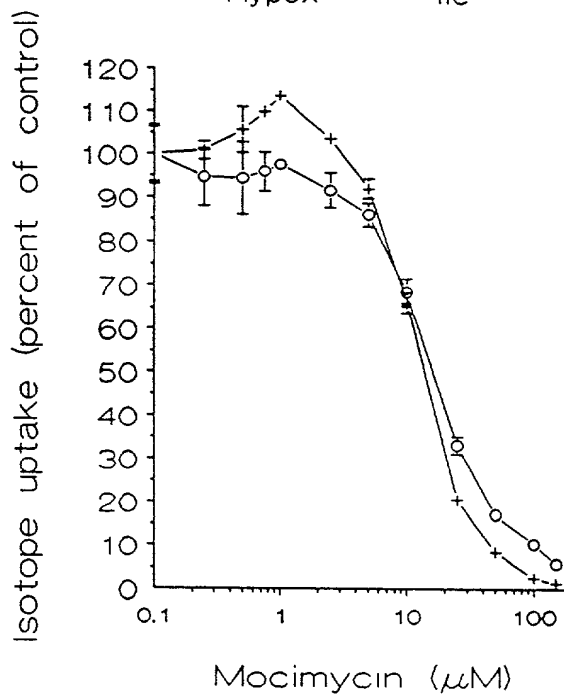
-- Hypox --○-- Ile



(B)

Mocimycin
(36hr incubation)

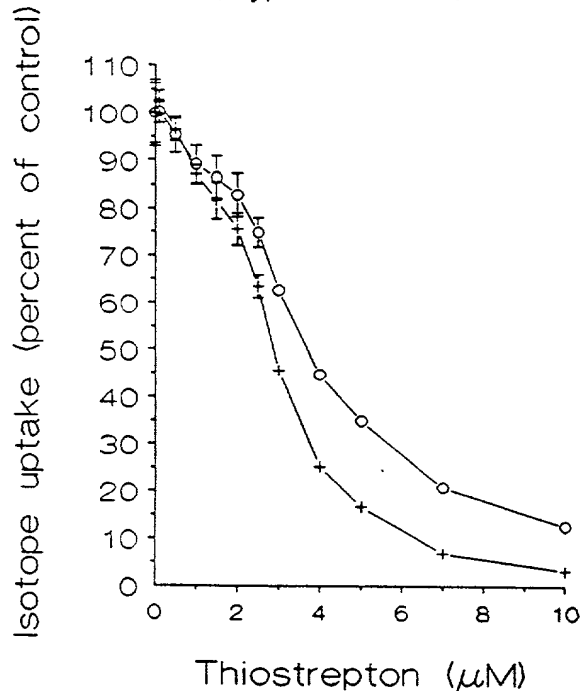
-- Hypox --○-- Ile



(C)

Thiostrepton
(36hr incubation)

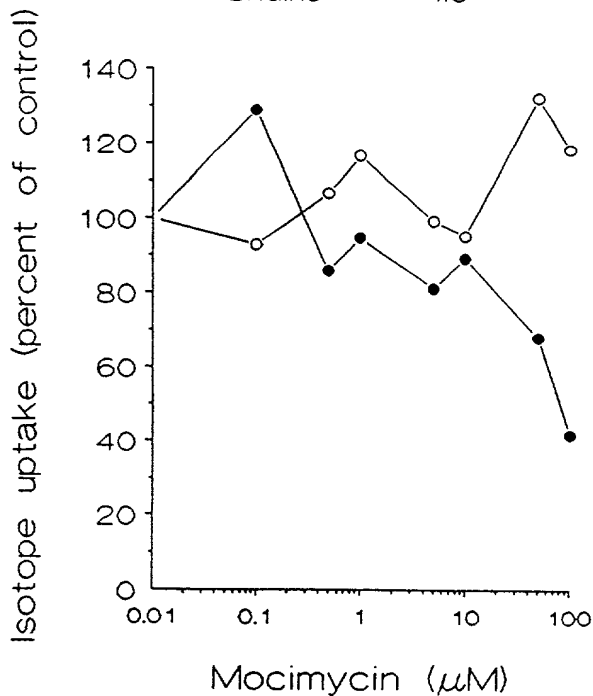
-- Hypox --○-- Ile



(D)

Mocimycin vs Myeloma
(24hr incubation)

--●-- Uridine --○-- Ile



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Figure 5 (cont)

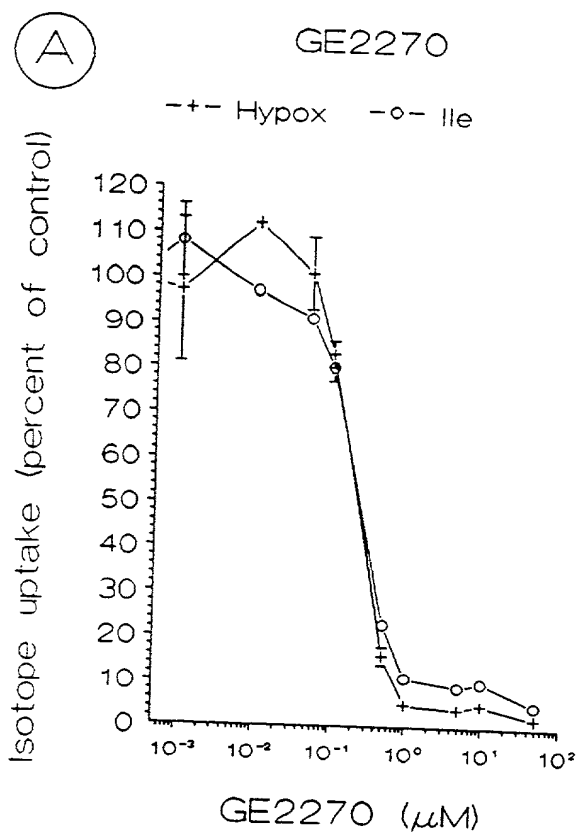


Figure 6

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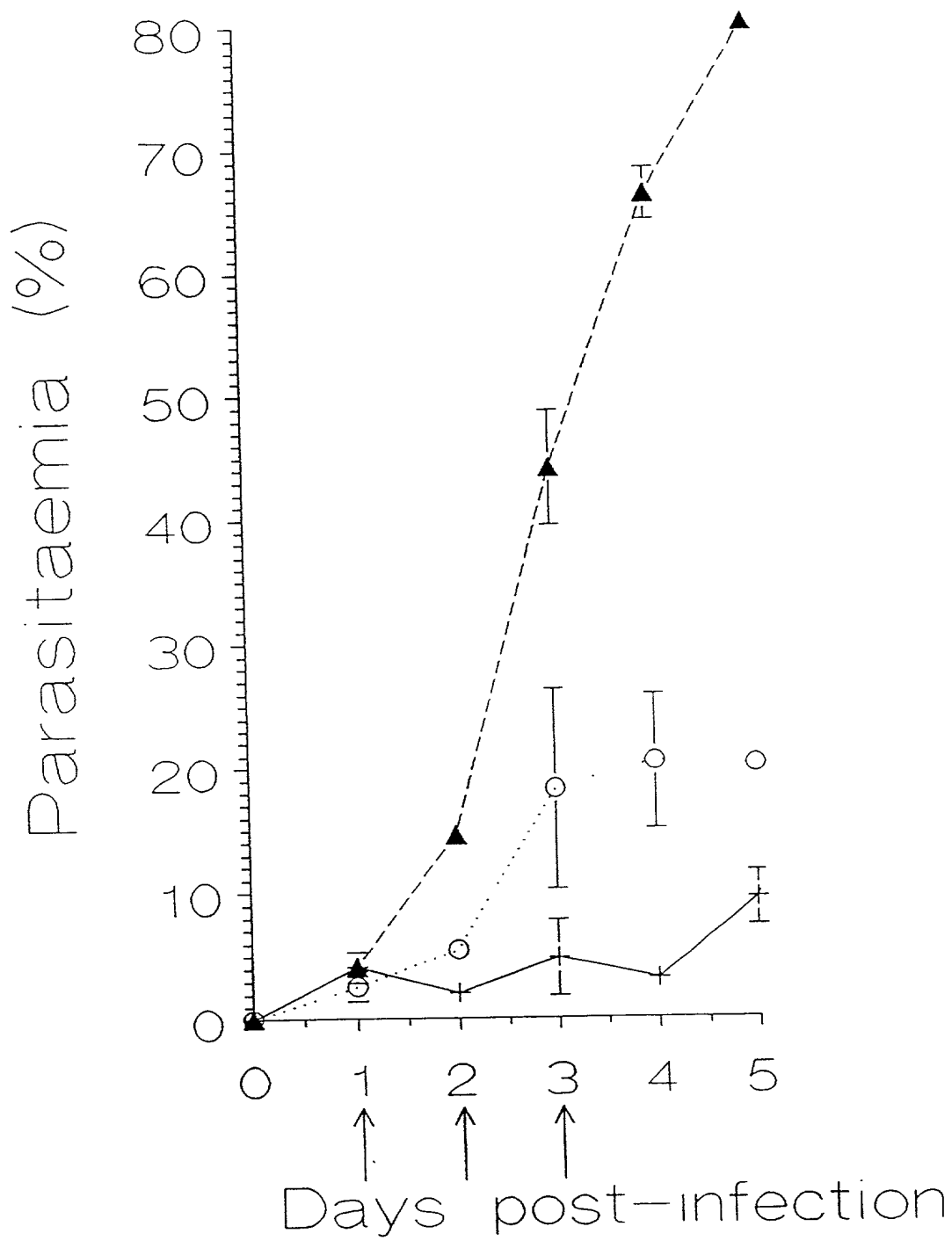
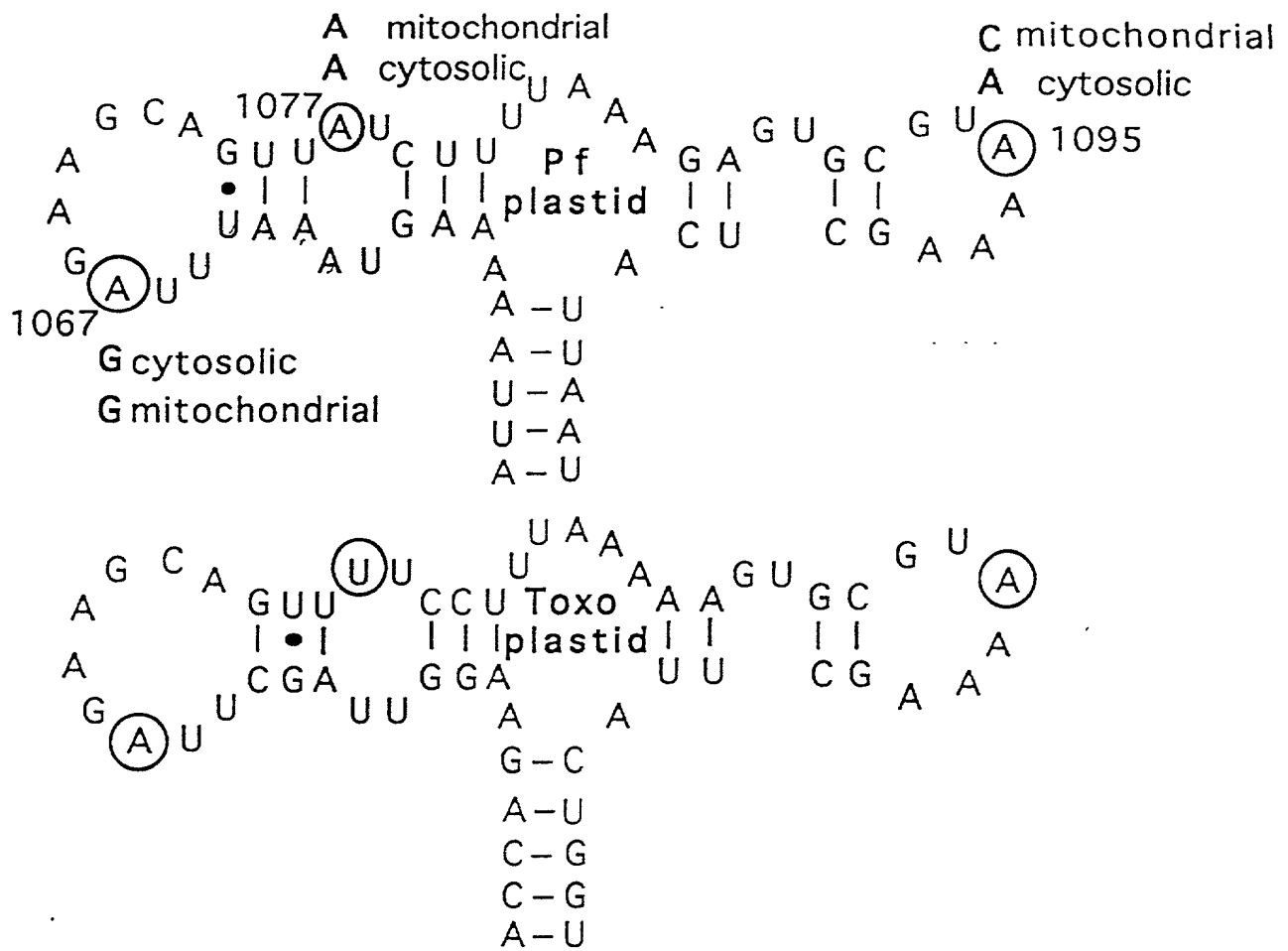
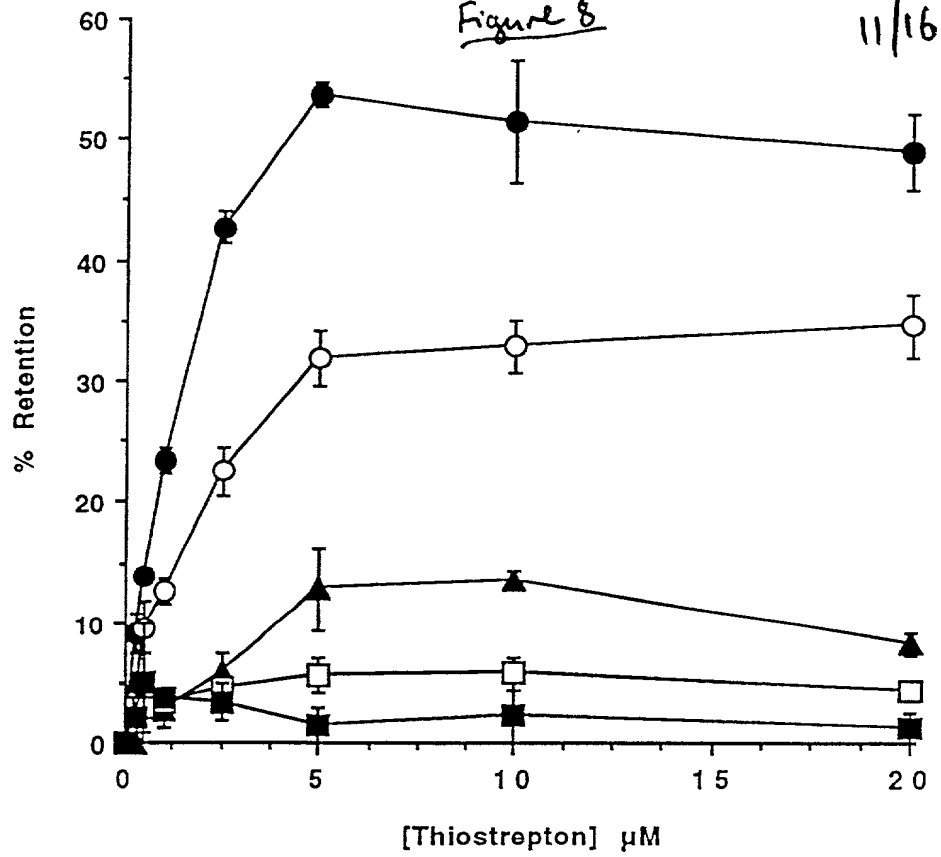


Figure 7 1916

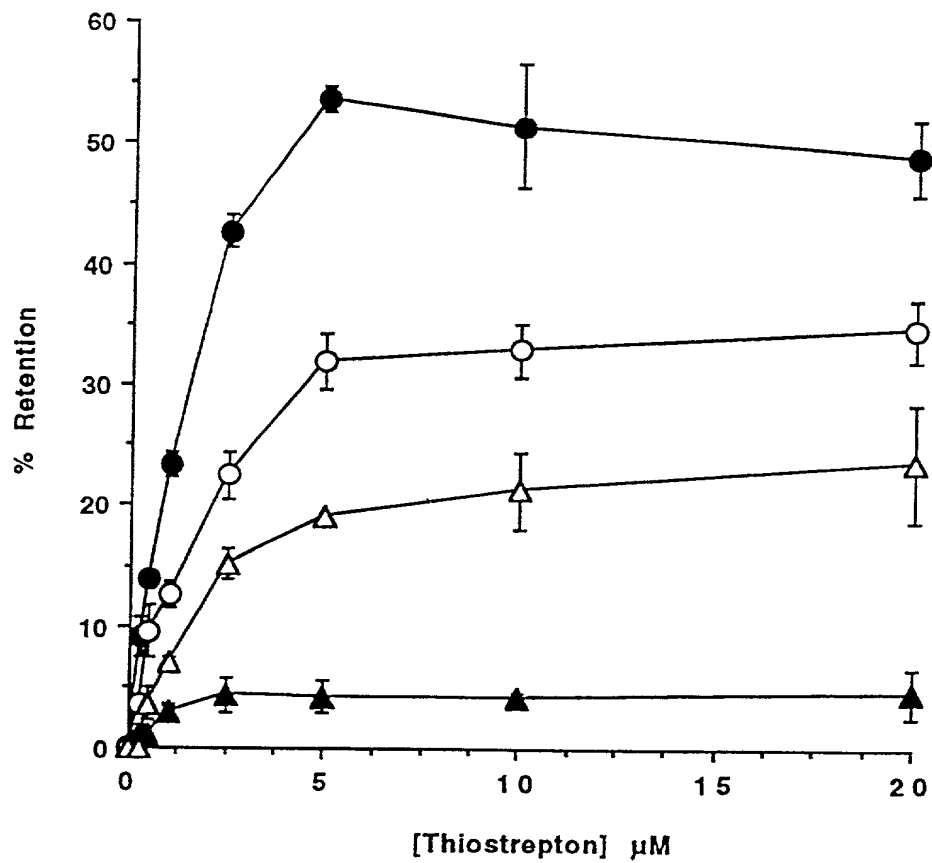
Sequence of the GTPase region of 23S_{pl} rRNAs



A.

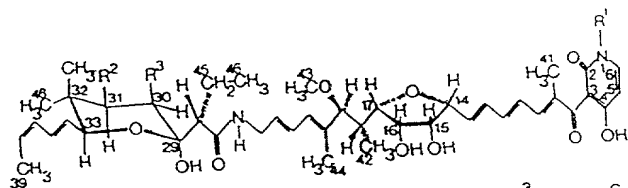


B.



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Figure 9

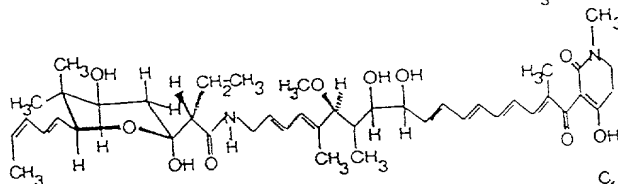
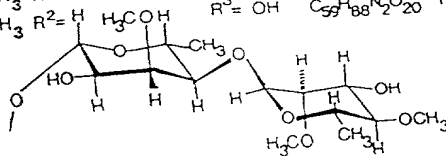


mocimycin, kirromycin
 aurodox
 heneicomycin
 efrotomycin

$R^1 = H$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$

$R^3 = OH$
 $R^3 = OH$
 $R^3 = H$
 $R^3 = OH$

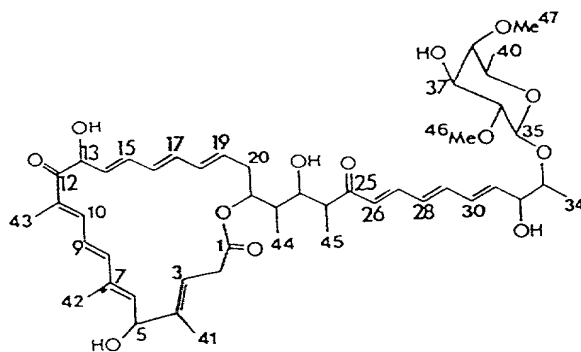
MW
 $C_{43}H_{60}N_2O_{12}$ 797
 $C_{44}H_{62}N_2O_{12}$ 811
 $C_{44}H_{62}N_2O_{11}$ 795
 $C_{59}H_{88}N_2O_{20}$ 1,145



MW
 $C_{44}H_{64}N_2O_{10}$ 781

Kirrothricin

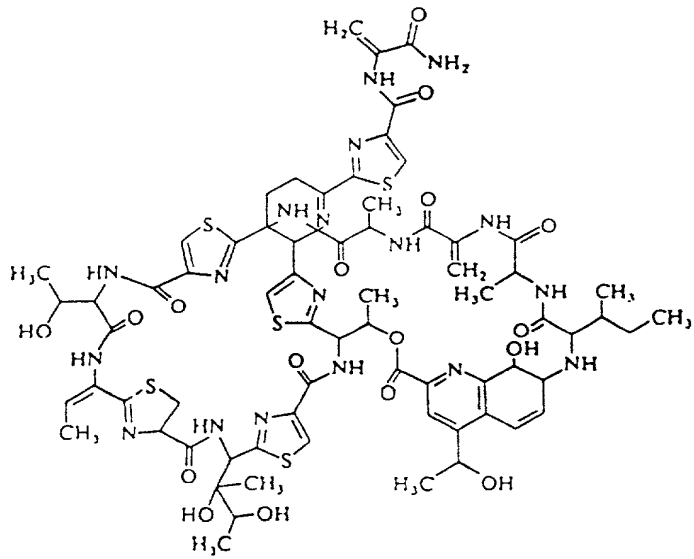
pulvomycin



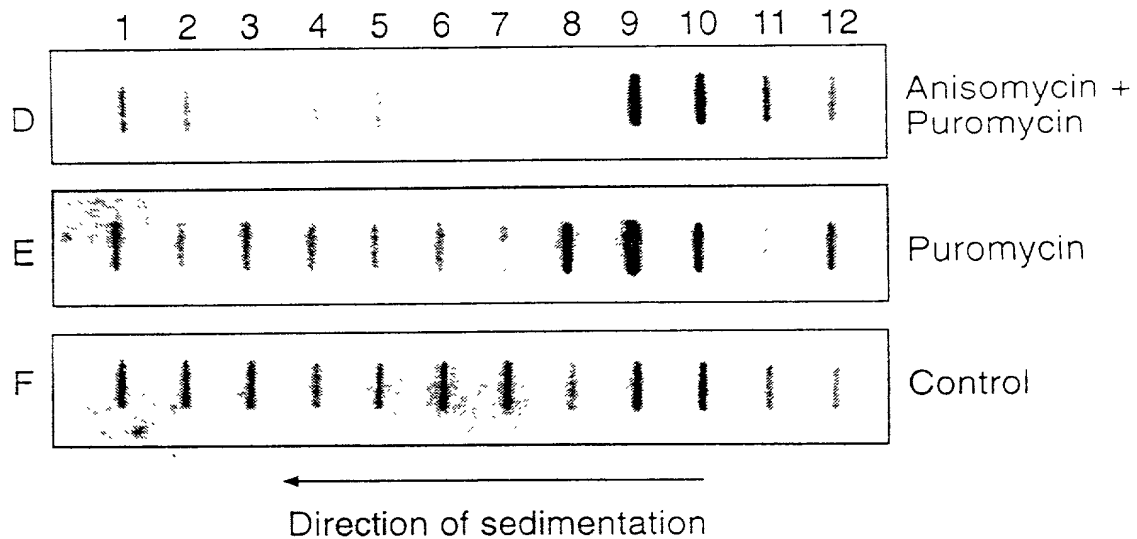
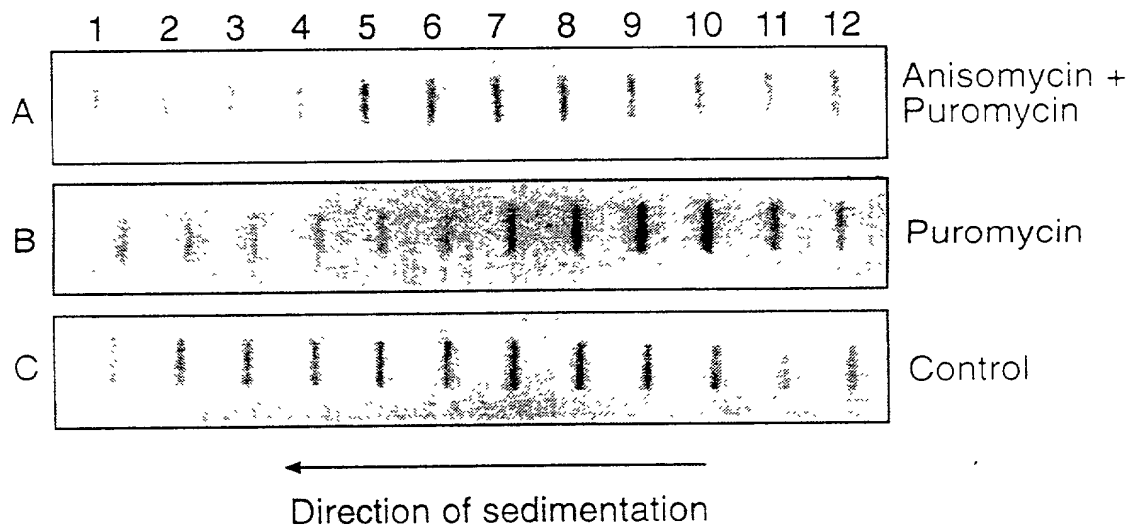
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Figure 10

Thiostrepton



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Figure 11



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Figure 12

